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10/581,706	06/05/2006	Kiichi Kusunoki	NNA-105-B	4899

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EXAMINER	
LICHTI, MATTHEW L	

ART UNIT	PAPER NUMBER
4174	

NOTIFICATION DATE	DELIVERY MODE
07/22/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/581,706	KUSUNOKI, KIICHI	
	Examiner	Art Unit	
	Matthew Lichti	4174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 June 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 June 2008* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/14/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the national stage entry filed on 06/05/2006 by Kusunoki for the invention titled "Automatic Driving Position Adjustment Control System and Method"

Claims 1-25 are pending.

Priority

2. Applicant's claim for the domestic benefit of prior-filed application PCT/IB05/03339 under 35 U.S.C. 365(c) is acknowledged.

3. Receipt is acknowledged of a certified copy of the foreign priority application, (JP) 2004-325241

Information Disclosure Statement

4. Applicant's Information Disclosure Statement submitted on 12/14/2006 has been fully considered by the examiner as indicated by the accompanying initialed copy of form PTO-1449.

Claim Objections

5. Claim 7 is objected to because of the following informalities: Two step (d)s are recited. The last two steps should be changed to (e) and (f). Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims **1, 2, 7, 8, 13, 14, 19, 20, and 22** are rejected under 35 U.S.C. 102(b) as being anticipated by Beninga et al. (DE 19522897, using English machine translation).

8. Regarding claim 1, Beninga et al. disclose an automatic driving position adjustment system for use in a vehicle having at least first (fig. 1, adjustable seat 2) and second adjustable components (adjustable elements 12b – 14b, page 3, line 29), wherein the first component is adjustable by an operator between a first and second position (page 2, line 31), comprising:

(a) a movement-distance sensor that generates an output signal indicative of the distance that the first adjustable component moves when adjusted by an operator between its first and second positions (position sensor 17, page 2, lines 46-48);

(b) a controller (controller 15, page 2, lines 46-47) responsive to the output signal of the movement-distance sensor (17) and adapted to compute a required distance that the second adjustable component (steering wheel 12 and mirrors 13 & 14) is to move on the basis of the distance moved by the first adjustable component (page 3, lines 43-47); and

(c) a motor that is actuated by the controller (motor operated control drives 12a – 14a, page 3, lines 38-39) and is drivingly engaged to the second adjustable component (12b-14b) to move the second component the required distance as computed by the controller (page 3, lines 43-47).

9. Regarding claims 2, 8, and 14, Beninga et al. disclose that the first adjustable component is a driver's seat (fig. 1, seat 2; page 2, line 31), and the second adjustable component is selected from the group consisting of: a steering wheel (12), door mirror (13), and interior mirror (14; page 3, lines 38-42).

10. Regarding claim 7, Beninga et al. disclose a vehicle, comprising:

(a) a first adjustable component (fig 1, adjustable seat 2; page 2, line 31);

(b) a first motor adapted to move the first adjustable component in response to an operator-actuated signal (servomotors on control drives 6a – 11a, page 2, lines 42-44);

(c) a movement-distance sensor (17) operatively coupled to the first motor and adapted to output a signal indicative of the distance that the first motor moves the first adjustable component in response to the operator-actuated signal (page 2, lines 46-48),

(d) a second adjustable component (adjustable elements 12b – 14b, page 3, line 29);

(e) a controller (15) responsive to the output signal of the movement-distance sensor (17) and adapted to compute a required distance that the second adjustable component (12a-14a) is to move on the basis of the distance moved by the first adjustable component (page 3, lines 43-47);

(f) a second motor actuated by the controller (motor operated control drives 12a – 14a, page 3, lines 38-39) and drivingly engaged to the second adjustable component

to move the second adjustable component the required distance as computed by the controller (page 3, lines 43-47).

11. Regarding claim 13, Beninga et al. disclose an automatic driving position adjustment system for use in a vehicle having at least first (fig. 1, seat 2; page 2, line 31) and second adjustable components (12–14; page 3, line 29), wherein the first component relates to the attitude of the driver (adjustable back rest 9, page 2, line 36) and is movable by the driver during a series of adjustment cycles (any time the driver adjusts the seat is an adjustment cycle), comprising:

(a) movement-distance detecting means (position sensor 17) for detecting the distance that the first adjustable component has moved from its position during the previous adjustment cycle to its position in the current adjustment cycle (page 2, lines 46-49);

(b) control means (controller 15) for computing the required distance that the second adjustable component (steering wheel or mirrors 12-14) is to move on the basis of the distance moved by the first adjustable component as detected by the movement distance detecting means (page 3, lines 43-47); and

(c) drive means (motor operated control drives 12a – 14a, page 3, lines 38-39) for moving the second adjustable component by the required distance as computed by the control means (page 3, lines 43-47).

12. Regarding claim 19, Beninga et al. disclose a method for use in a vehicle to automatically adjust the position of a second adjustable component in response to the operator-actuated adjustment of a first adjustable component, comprising:

(a) detecting the distance of operator-actuated adjustment of the first adjustable component (page 2, lines 46-49);

(b) computing the required distance of adjustment that the second adjustable component is to undergo on the basis of the detected amount of adjustment of the first adjustable component (page 3, lines 43-47); and

(c) moving the second adjustable component by the required distance of adjustment (page 3, lines 43-47).

13. Regarding claim 20, Beninga et al. disclose that the first adjustable component is a driver's seat (seat 2; page 2, line 31), and the detected distance of adjustment is measured as distance traveled by the seat (page 2, lines 46-49).

14. Regarding claim 22, Beninga et al. disclose that the second adjustable component is selected from the group consisting of: a steering wheel (12), door mirror (13), and interior mirror (14; page 3, lines 38-42)

15. Claims **1, 3, 4, 6, 7, 9, 10, 12, 13, 15, 16, 18, 19, 21, 23 and 24** are rejected under 35 U.S.C. 102(b) as being anticipated by Wang (U.S. Pub 2004/0109247).

16. Regarding claim 1, Wang discloses an automatic driving position adjustment system for use in a vehicle having at least first (fig. 1, left mirror 20) and second adjustable components (right mirror 22) wherein the first component is adjustable by an operator between a first and second position (par. 12), comprising:

(a) a movement-distance sensor (position sensor 48) that generates an output signal indicative of the distance that the first adjustable component (LH mirror 20) moves when adjusted by an operator between its first and second positions (par. 15);

(b) a controller (50) responsive to the output signal of the movement-distance sensor (48) and adapted to compute a required distance that the second adjustable component (RH mirror 22) is to move on the basis of the distance moved by the first adjustable component (par. 15); and

(c) a motor (24) that is actuated by the controller (50) and is drivingly engaged to the second adjustable component (RH mirror 22) to move the second component the required distance as computed by the controller (par. 15).

17. Regarding claim 3 and 9, Wang discloses that the controller (50) is further adapted to compute the required distance (RH mirror 22 angle beta) by multiplying a prescribed coefficient by the distance that the first adjustable component (LH mirror 20 angle alpha) has moved (par. 19).

18. Regarding claims 4 and 10, Wang discloses that the controller (50) is further adapted to actuate the motor (24) to move the second adjustable component (right hand mirror 22) when the vehicle is in a prescribed (LH/RH mode position) state (par. 13).

19. Regarding claim 6, Wang discloses that the first adjustable component (LH mirror 20) is a first mirror surface that moves through a range of angular positions when adjusted by an operator between the first and second positions and the second adjustable component (RH mirror 22) is a second mirror surface a that is adjustable through a range of angular positions (par. 17); wherein the movement-distance sensor (48) output is indicative of the change in the angular position of the first mirror surface (par. 18, measured LH mirror angle alpha).

20. Regarding claim 7, Wang discloses a vehicle, comprising:

(a) a first adjustable component (fig. 1, left mirror 20; col. 2, lines 26-31);

(b) a first motor (24) adapted to move the first adjustable component in response to an operator-actuated signal (par. 12);

(c) a movement-distance sensor (position sensor 48) operatively coupled to the first motor and adapted to output a signal indicative of the distance that the first motor moves the first adjustable component in response to the operator-actuated signal (par. 15),

(d) a second adjustable component (RH mirror 22, par. 12);

(e) a controller (15) responsive to the output signal of the movement-distance sensor (17) and adapted to compute a required distance that the second adjustable component (RH mirror 22) is to move on the basis of the distance moved by the first adjustable component (par. 15);

(f) a second motor (24) actuated by the controller (50) and drivingly engaged to the second adjustable component (RH mirror 22) to move the second adjustable component the required distance as computed by the controller (par. 15).

21. Regarding claim 12, Wang discloses that the first adjustable component is a first mirror surface (LH mirror 20); wherein the first motor (24) rotates the first mirror through an angular distance (par. 17); and wherein the movement-distance sensor output is indicative of the angular distance (par. 18, measured LH mirror angle alpha).

22. Regarding claim 13, Wang discloses an automatic driving position adjustment system for use in a vehicle having at least first (LH mirror 20) and second (RH mirror 22) adjustable components (par. 12), wherein the first component relates to the attitude of the driver (the desired mirror angle relates to the attitude of the driver) and is movable by the driver during a series of adjustment cycles (any time the driver adjusts the mirror is an adjustment cycle), comprising:

(a) movement-distance detecting means (position sensor 48) for detecting the distance that the first adjustable component (LH mirror 20) has moved from its position

during the previous adjustment cycle to its position in the current adjustment cycle (par. 15);

(b) control means (controller 50) for computing the required distance that the second adjustable component (RH mirror 22) is to move on the basis of the distance moved by the first adjustable component (LH mirror 20) as detected by the movement distance detecting means (par. 15); and

(c) drive means (motor 24) for moving the second adjustable component (RH mirror 22) by the required distance as computed by the control means (par. 15).

23. Regarding claim 15, Wang discloses that the control means (controller 50) computes the required distance (RH mirror 22 angle beta) by multiplying a prescribed coefficient by the distance moved by the first adjustable component (LH mirror 20 angle alpha) as detected by the movement distance detecting (position sensor 48) means (par. 19).

24. Regarding claim 16, Wang discloses that the control means (50) moves the second adjustable component (right hand mirror 22) when the vehicle is in an interlocked (LH/RH mode position) state (par. 13).

25. Regarding claim 18, Wang discloses that the first adjustable component is a first mirror surface (LH mirror 20) adjustable about an angle (par. 17) and the second adjustable component is a second mirror surface (RH mirror 22), wherein the

movement-distance detecting means detects the angle that the first mirror is rotated (par. 18, measured LH mirror angle alpha).

26. Regarding claim 19, Wang discloses a method for use in a vehicle to automatically adjust the position of a second adjustable component (RH mirror 22) in response to the operator-actuated adjustment of a first (LH mirror 20) adjustable component, comprising:

(a) detecting the distance of operator-actuated adjustment of the first (LH mirror 20) adjustable component (par. 15);

(b) computing the required distance of adjustment that the second adjustable component (RH mirror 22) is to undergo on the basis of the detected amount of adjustment of the first (LH mirror 20) adjustable component (par. 15); and

(c) moving the second adjustable component by the required distance of adjustment (par. 15).

27. Regarding claim 21, Wang discloses that the first adjustable component is a mirror surface (LH mirror 20) that is adjustable by rotation (par. 17), and the detected distance of adjustment is measured as an angle through which the mirror is rotated (par. 18, measured LH mirror angle alpha).

28. Regarding claim 23, Wang discloses that the step of computing the required distance of adjustment (RH mirror 22 angle beta) further comprises multiplying a

prescribed coefficient by the detected distance of adjustment (LH mirror 20 angle alpha) of the first adjustable component (par. 19).

29. Regarding claim 24, Wang discloses that the step of moving the second adjustable component (right hand mirror 22) by the required distance of adjustment takes place when the vehicle is in a prescribed (LH/RH mode position) state (par. 13).

Claim Rejections - 35 USC § 103

30. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

31. Claims **5, 11, 17, and 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang (U.S. Pub 2004/0109247) in view of Barthel et al. (U.S. 5,081,586).

32. Regarding claims 5, 11, 17, and 25, Wang discloses the invention substantially as claimed including an interlocked (or prescribed) state, in which the second component moves automatically.

However, Wang does not disclose that the second component moves automatically when vehicle speed is zero, the position of the shift lever is in park, the position of the shift lever is in neutral, or the parking brake is on.

Barthel et al. disclose an automatic driving position adjustment system for use in a vehicle, in which the automatic adjustment occurs when the vehicle is in park (col. 21, lines 1-13).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the automatic driving position adjustment system with an interlock state of Wang to include the teachings of Barthel et al. so that components do not automatically adjust when the vehicle is moving. The modification is desirable because automatic adjustments could distract the driver or obstruct their vision and create a safety hazard.

Conclusion

33. All claims are rejected with prior art. Claims 1, 2, 7, 8, 13, 14, 19, 20, and 22 are anticipated by Beninga et al. (DE 19522897). Claims 1, 3, 4, 6, 7, 9, 10, 12, 13, 15, 16, 18, 19, 21, 23 and 24 are anticipated by Wang (U.S. Pub 2004/0109247). Claims 5, 11, 17, and 25 are unpatentable over Wang (U.S. Pub 2004/0109247) in view of Barthel et al. (U.S. 5,081,586).

34. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Noda et al. (U.S. Pub 2005/0131609) disclose an automatic driving position adjustment system in which a second adjustable component is automatically adjusted based on the position of a first adjustable component.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew Lichti whose telephone number is (571) 270-

5374. The examiner can normally be reached on Monday - Friday 7:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly D. Nguyen can be reached on (571) 272-2402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew Lichti/
Examiner, Art Unit 4174

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